

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for ~~introduction or extraction of~~ introducing exogenic bioparticles into ~~or from~~ biological membrane-enveloped structures, comprising:
 preparing a sample comprising biological membrane-enveloped structures,
 magnetically susceptible particles and exogenic bioparticles, and
 applying a magnetic alternating field to said sample, ~~a sample comprising biological~~
 ~~membrane-enveloped structures and magnetically susceptible particles and exogenic~~
 ~~bioparticles~~, whereby an increase of the thermal ~~and optionally kinetic~~ energy of said
 magnetically susceptible particles causes the formation of ~~temporary~~ pores in said biological
 membrane-enveloped structures,
 wherein said pores allow the introduction ~~or extraction of~~ said exogenic bioparticles
 into ~~or from~~ said biological membrane-enveloped structures, and
 wherein said biological membrane-enveloped structures are selected from the group
 consisting of cells, bacteria, virus particles, and organelles at a subcellular level, and
 wherein said magnetically susceptible particles comprise magnetic iron-containing
 crystals.
2. (Currently Amended) ~~A~~ The method according to claim 1, wherein said magnetic field has an alternating field direction of a frequency in the range 1-5 MHz.
3. (Currently Amended) ~~A~~ The method according to claim 1, wherein said magnetic field has a field strength of 1 mT.
4. (Currently Amended) ~~A~~ The method according to claim 1, wherein said magnetic field is non-homogeneous and has an alternating gradient field direction.
- 5-6. (Canceled).

7. (Currently Amended) ~~A~~The method according to claim 1, wherein said exogenic bioparticles are selected from the group consisting of DNA molecules, RNA molecules, proteins, other biopolymers, peptides, chemical preparations, organic compounds, inorganic compounds, synthetic polymers and combinations thereof.

8. (Canceled).

9. (Currently Amended) ~~A~~The method according to claim 1, for use for ~~specific~~ lysis of biological membrane-enveloped structures.

10. (Currently Amended) ~~A~~The method according to claim 1, for use for modifying the genetic code of biological membrane-enveloped structures.

11. (Withdrawn) A device for performing the method as defined in claim 1, comprising at least one coil for generating a magnetic alternating field, optionally, a thermostat for accurate temperature control of said at least one coil, a means for variable and accurate timing control of the time during which said alternating current is on and during which a sample to be treated is exposed to said applied magnetic field, and control system for accurate setting of strength and frequency of said alternating current.

12. (Currently Amended) ~~A~~The method according to claim 2, wherein said magnetic field has a field strength of 1 mT.

13. (Currently Amended) ~~A~~The method according to claim 2, wherein said magnetic field is non-homogeneous and has an alternating gradient field direction.

14-15. (Canceled).

16. (Currently Amended) ~~A~~The method according to claim 2, wherein said bioparticles are selected from the group consisting of DNA molecules, RNA molecules,

proteins, other biopolymers, peptides, chemical preparations, organic compounds, inorganic compounds, synthetic polymers and combinations thereof.

17. (Canceled).

18. (Currently Amended) ~~A~~The method according to claim 2, for use for ~~specific~~ lysis of biological membrane-enveloped structures.

19. (Currently Amended) ~~A~~The method according to claim 2, for use for modifying the genetic code of biological membrane-enveloped structures.

20. (Withdrawn) A device for performing the method as defined in claim 2, comprising at least one coil for generating a magnetic alternating field, optionally, a thermostat for accurate temperature control of said at least one coil, a means for variable and accurate timing control of the time during which said alternating current is on and during which a sample to be treated is exposed to said applied magnetic field, and control system for accurate setting of strength and frequency of said alternating current.

21. (New) The method according to claim 1, wherein said applying a magnetic alternating field to said sample increases the thermal and the kinetic energy of said magnetically susceptible particles.

22. (New) The method according to claim 2, wherein said applying a magnetic alternating field to said sample increases the thermal and the kinetic energy of said magnetically susceptible particles.